

MEMO

DATE: February 1, 2007

TO: Transportation and Communications Committee

FROM: Richard J. Marcus, Program Manager for Maglev, (213) 236-1819, Marcus@scag.ca.gov

SUBJECT: Maglev Program Update

BACKGROUND:

Staff is working with various consultants to further a variety of Maglev studies. This presentation is an update of the various studies, which include:

- The SCAG Initial Operating Segment (IOS)
- The High-Speed Ground Transportation Business Case Model
- The SCAG High-Speed Ground Transport Alternatives Analysis
- The West Los Angeles Multi-Modal Transfer Facility
- The Maglev System Design


Staff will give an update on the High-Speed Ground Transport Alternatives Analysis and the West Los Angeles Multi-Modal Transfer Facility projects.

Mr. David Chow, project manager with the IBI Group, will provide an update on the recently completed preliminary engineering (Phase 2) of the IOS, progress of the Business Case Model, and Maglev System Design.

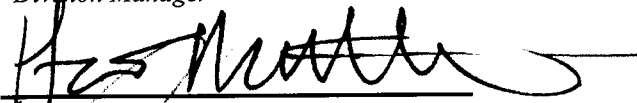
FISCAL IMPACT:

Work associated with these projects are included in the current year overall work program.

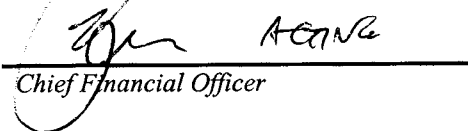
Reviewed by:


Division Manager

Reviewed by:



Department Director

Reviewed by:


Chief Financial Officer

**Maglev Program / High Speed
Regional Transport Update**

Mr. Richard J. Marcus - SCAG Staff
Mr. David Chow – IBI Group
February 1, 2007



**Maglev Program / High Speed Regional
Transport Update**

- High Speed Ground Transportation Alternatives Analysis
- West Los Angeles Multi-Modal Transfer Facility
- SCAG Initial Operating Segment (IOS)
- Maglev System Design
- High Speed Ground Transportation Business Model

**Maglev Program / High Speed
Regional Transport Update**

**Alternatives Analysis of the
Los Angeles/Ontario
Regional High-Speed
Ground Transportation
Project**

Maglev Program / High Speed
Regional Transport Update

Los Angeles/Ontario
Regional High-Speed Rail
Initial Operating Segment (IOS)

Alternatives Analysis
Workscope and Schedule

Alternatives Analysis
Alternative IOS Alignments –
Maglev and Steel Wheel Technologies

- I-10 Alignment (Preferred Maglev)
- I-10/Northern UPRR Alignment (Maglev Only)
- Southern UPRR Alignment (Preferred Steel Wheel)

<p align="center">Alternatives Analysis</p> <p>Alternative IOS Alignments -</p> <hr/> <p>Critical Characteristics for Each Technology</p> <p>I-10 Alignment</p> <ul style="list-style-type: none"> - Preferred Maglev alignment - Most direct route - Most accessible intermediate stations <p>Southern UPRR</p> <ul style="list-style-type: none"> - Preferred Steel-Wheel alignment - Less expensive alignment - Less challenging topography
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<p align="center">Maglev Program / High Speed Regional Transport Update</p> <hr/> <p align="center">West Los Angeles Multi-Modal Transfer Facility</p>
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<p align="center">West L.A. Transfer Facility</p> <hr/> <p>(Project Understanding)</p> <ul style="list-style-type: none"> ➤ Study Expected to be Complete by June 30, 2007 ➤ Alternative Site Survey ➤ Multi-Modal Transfer Facility ➤ Consensus-building effort ➤ Technology Neutral
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<p>West L.A. Transfer Facility</p> <p>Project Environment</p> <ul style="list-style-type: none"> ➤ Freeways & Streets are Congested ➤ Dense land use ➤ Vision for this area includes intense urban redevelopment ➤ Various Existing & Planned Transit Routes & Systems ➤ Diverse Political Interests & Decision Making

<p>West L.A. Transfer Facility</p> <p>Findings to Date</p> <ul style="list-style-type: none"> ➤ What Transportation modes will be served? <ul style="list-style-type: none"> ✓ Maglev or HSR, BRT, Subway or Light Rail, Local Buses. ➤ What sites are being considered? <ul style="list-style-type: none"> ✓ VA Site is no longer being considered. Possible sites include I-405 at Wilshire and I-405 at Pico among other options. ➤ How will it be developed? <ul style="list-style-type: none"> ✓ Decentralize the facility and spread out the parking, linking to the station platform by people-movers and/or shuttles.
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<p>West L.A. Transfer Facility</p> <p>Next Steps</p> <ul style="list-style-type: none"> ➤ Additional <u>Input from Stakeholders</u> ➤ Detailed Analysis of <u>Facility Layout and Site Development</u> ➤ Additional Details Concerning <u>Traffic Impacts and Site Size</u> ➤ Additional Analysis Concerning <u>Decentralized Site Concept</u> (Parking Locations and Linkages to Platform)

UPDATE ON ACTIVITIES

Review of Initial Operating Segment (TSC, 9-14-98)
High Speed Regional Transport System Design
Business Plan Approach to Financing

OVERVIEW OF IOS

OPERATIONAL CHARACTERISTICS

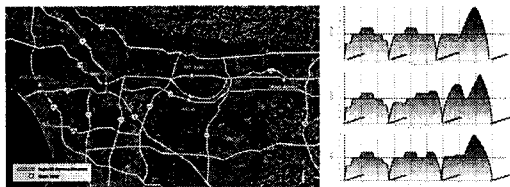
- Frequency: 10 min. peak/20 minutes off-peak
- 18 Hours of Operation: (5:30 AM – 11:30 PM)
- 6 – 8 Car Trains (depending on demand)
- Route Capacity: 10,600/hr, 138,200/day, 50.5m/year
- Top Speed ~240 mph, Average Speed ~103 mph

OVERVIEW OF IOS

INITIAL OPERATING SEGMENT ALIGNMENT

Alternatives:

- I-10: 54.7 miles, 32 minutes, Top 249 mph, Avg. 103.4 mph
- SR-60: 57 miles, 33 minutes, Top 239 mph, Avg. 103.4 mph
- BPRR: 57 miles, 33 minutes, Top 249 mph, Avg. 103.2 mph



OVERVIEW OF IOS

FULLY ELEVATED ALIGNMENT

- Maximize Speed, Minimize Environmental Impacts/ Costs
- Maximize use of transportation corridors, public ROW
- Balancing Act of Engineering Design
- Fully Elevated Alignment in a Seismic Environment

OVERVIEW OF IOS

FACILITIES

Four Stops along Alignment

- Ontario Airport
- San Gabriel Valley
- Union Station
- West Los Angeles

Maintenance Facilities:

- Central Maintenance Facility
- Decentralized Maintenance Facility

HSRT SYSTEM DESIGN

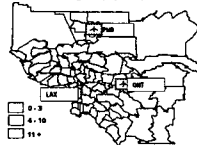
GOAL

- Develop a concept to link Airports with a High-Speed Regional Transport System

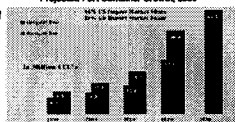
Address the following:

- Regional Aviation Demand
- Traffic Congestion and Mobility
- Goods Movement
- Regional Growth Management

Annual Passenger Trips per Capita, 2030



Projected Port Container Growth, 2030



Maple Program/High-Speed Regional Transport Update

HSRT SYSTEM DESIGN

PROPOSED HSRT NETWORK

Maple Program/High-Speed Regional Transport Update

BUSINESS PLAN APPROACH TO FINANCING

CONCEPT

- Investigating use of private/public partnership to fund the system
- Preliminary Engineering to define the cost of the system
- Financial Sustainability will be a requirement
- Low Operating Cost and high efficiency are the keys

Maple Program/High-Speed Regional Transport Update

BUSINESS PLAN APPROACH TO FINANCING

REVENUE STREAMS

- Ridership and Transport Business Related Revenues
- Airport Contributions
- Goods Movement Opportunities
- Related/Transit Oriented Development Potential

RESULTS

- Financial Sustainability
- Business Potential
- Consistency with Regional Goals

